AMENDMENTS TO THE CLAIMS

1.   (Withdrawn) A method comprising:

broadcasting a first frame on a physical subnet the frame containing a predetermined port number;

checking a response for a current address of a responding device; and

forcing the responding device to change to a new protocol address if the current protocol address is not within a access range of a management device

2.   (Withdrawn) The method of claim 1 further comprising:

identifying an unused address to be used as the new protocol address.

3.   (Withdrawn) The method of claim 2 wherein identifying comprises:

iteratively querying addresses within the access range until no response is received to a query.

4.   (Withdrawn) The method of claim 1 wherein broadcasting a first frame comprises:

setting a hardware address in the frame to all addresses;

setting an internet protocol (IP) address in the frame to all addresses; and

setting a user datagram protocol (UDP) port number in the frame to the predetermined port.

5.   (Withdrawn) The method of claim 1 wherein forcing comprises:

broadcasting a second frame on the physical subnet directed to the predetermined port number, the frame including a hardware address of the responding device and the new protocol address.

6.   (Withdrawn) A method comprising:

receiving at a device a forcing frame directed to a predetermined port and including a hardware address of the device;

changing a current protocol address of the device to a new protocol address specified in the frame, wherein the current protocol address is outside an address range of a management device and the new protocol address is within the address range of the management device; and

connecting to the management device using the new protocol address.

7.   (Withdrawn) The method of claim 6 further comprising:

enabling receipt of the frame directed to the predetermined port only on a local port of the device; and

disabling receipt on the local port a fixed time after power up.

8.   (Withdrawn) The method of claim 6 comprising:

receiving a first broadcast frame over a network from the management device;

identifying if the first broadcast frame is directed to the predetermined port; and

sending a response frame to a source of the first broadcast frame if the first broadcast frame was directed to the predetermined port, the response frame including a current protocol address.

9.   (Withdrawn) The method of claim 6 wherein the forcing frame is a broadcast frame specifying all hardware addresses and all protocol addresses.

10.   (Withdrawn) The method of claim 8 wherein receiving a first broadcast packet comprises:

snooping a hardware layer of a protocol stack for a frame directed to the predetermined port; and

forwarding the frame past a protocol layer independent of a protocol address if directed to the predetermined port.

11.   (Withdrawn) The method of claim 8 wherein receiving a first broadcast frame comprises:

passing the frame through a hardware layer and a protocol layer of a protocol stack based on a selection of all addresses in a hardware address field and a protocol address field of the first broadcast frame.

12.   (Currently amended) A system comprising:

a network element including a direct <u>internet protocol</u> ~~access~~ module; and

a management node residing <u>at</u> [[on]] a same physical subnet as the network element, the management node <u>comprising computer executable instructions that if executed perform actions including:</u>

~~to force~~ <u>forcing</u> the network element to have an <u>IP</u> address within an access range of the management node by broadcasting <u>a broadcast frame</u> to the direct <u>internet protocol</u> ~~access~~ module without reconfiguring the management node.

13.   (Original) The system of claim 12 wherein the management node and the network element are coupled together by an Ethernet connection.

14.   (Original) The system of claim 12 wherein the network element further includes a packet filter to snoop packets arriving at a hardware layer of a protocol stack.

15.   (Currently amended) The system of claim 12 wherein the network element comprises:

an external port; and

an internal port, wherein the direct <u>internet protocol</u> ~~access~~ module is only enabled on the internal port.

16.   (Currently amended) The system of claim 15 wherein the direct <u>internet protocol</u> ~~access~~ module is disabled a <u>finite</u> predetermined <u>amount of</u> time after power up.

17.   (Currently amended) The system of claim 12 wherein the direct <u>internet protocol</u> ~~access~~ module receives frames directed to a predefined port independent of a protocol address.

18.   (Currently amended) The system of claim 12 wherein the management node ~~can use~~ <u>uses</u> higher level protocols to manage the network element immediately after forcing the address.

19.   (Withdrawn) A computer readable storage media containing executable computer program instructions which when executed cause a digital processing system to perform a method comprising:

broadcasting a first frame on a physical subnet the frame containing a predetermined port number;

checking a response for a current address of a responding device; and

forcing the responding device to change to a new protocol address if the current protocol address is not within a access range of a management device.

20.   (Withdrawn) The computer readable storage media of claim 19 which when executed cause a digital processing system to perform a method further comprising:

identifying an unused address to be used as the new protocol address.

21.   (Withdrawn) The computer readable storage media of claim 20 which when executed cause a digital processing system to perform a method further comprising:

iteratively querying addresses within the access range until no response is received to a query.

22.   (Withdrawn) The computer readable storage media of claim 19 which when executed cause a digital processing system to perform a method further comprising:

setting a hardware address in the frame to all addresses;

setting an internet protocol (IP) address in the frame to all addresses; and

setting a user datagram protocol (UDP) port number in the frame to the predetermined port.

23. (Withdrawn) The computer readable storage media of claim 19 which when executed cause a digital processing system to perform a method further comprising:

broadcasting a second frame on the physical subnet directed to the predetermined port number, the frame including a hardware address of the responding device and the new protocol address.

24. (Withdrawn) A computer readable storage media containing executable computer program instructions which when executed cause a digital processing system to perform a method comprising:

receiving at a device a forcing frame directed to a predetermined port and including a hardware address of the device;

changing a current protocol address of the device to a new protocol address specified in the frame, wherein the current protocol address is outside an address range of a management device and the new protocol address is within the address range of the management device; and

connecting to the management device using the new protocol address.

25. (Withdrawn) The computer readable storage media of claim 24 which when executed cause a digital processing system to perform a method further comprising:

enabling receipt of the frame directed to the predetermined port only on a local port of the device; and

disabling receipt on the local port a fixed time after power up.

26. (Withdrawn) The computer readable storage media of claim 24 which when executed cause a digital processing system to perform a method further comprising:

receiving a first broadcast frame over a network from the management device;

identifying if the first broadcast frame is directed to the predetermined port; and

sending a response frame to a source of the first broadcast frame if the first broadcast frame was directed to the predetermined port, the response frame including a current protocol address.

27.   (Withdrawn) The computer readable storage media of claim 24 which when executed cause a digital processing system to perform a method further comprising:

the forcing frame is a broadcast frame specifying all hardware addresses and all protocol addresses.

28.   (Withdrawn) The computer readable storage media of claim 26 which when executed cause a digital processing system to perform a method further comprising:

snooping a hardware layer of a protocol stack for a frame directed to the predetermined port; and

forwarding the frame past a protocol layer independent of a protocol address if directed to the predetermined port.

29.   (Withdrawn) The computer readable storage media of claim 26 which when executed cause a digital processing system to perform a method further comprising:

passing the frame through a hardware layer and a protocol layer of a protocol stack based on a selection of all addresses in a hardware address field and a protocol address field of the first broadcast frame.